

Research Grants for PhD students from the China Scholarship Council

Information Form (please read the guidelines carefully on the website www-csc.utt.fr)

Supervisor's name : Given names :

Status (prof., assistant prof., ...):

Laboratory : Website address :

Institution : Website address :

Scientific competence of the supervisor:

The thesis will be supervised by a team of specialists of chemical engineering and biological (Lokmane Abdelouahed, Salma Latique, Bechara Taouk and Lamiae Vernieres) and focus mainly around the biomass valorization, bio-hydrogen production, bio-oil production, optimisation, mathematical model...

Two major publications in the field proposed for the PhD :

1.
2.

Website address of the personal page :

Supervisor's email :

Description of the research work proposed for a PhD **Topic # (see list) :**

Title :

Subject :

Objectives of the project:

Our ambition is to implement a revolutionary solution for hydrogen production by harnessing the exceptional properties of microalgae. By aligning our research with the latest scientific advancements, we aim to develop a process that offers significant advantages in terms of sustainability and energy efficiency.

This initiative holds crucial importance in the realm of scientific research for several compelling reasons. Firstly, by adopting a biomass-based approach, our project will contribute to mitigating greenhouse gas emissions, thus aiding in the fight against climate change. Secondly, by targeting green hydrogen production, we address the growing demand for a clean and renewable energy source.

Scientific literature highlights the interest in hydrogen production from microalgae, necessitating a comprehensive approach to overcome obstacles and leverage global progress. However, much of this research remains qualitative, lacking concrete quantification. Moreover, there is a notable lack of in-depth comparative studies on various strains of microalgae and the impact of operational conditions (such as temperature, pH, light influence, and nutrient input) on hydrogen production. Additionally, the transition from laboratory research to industrial applications, including precise

Keywords :

Expected collaborations :

Background required from the applicant :

Existence of a PDF file detailing the proposal ("yes" or "no") :

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